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Description of *Tychius frater* sp. n. from the Central Asia (Coleoptera Curculionidae)

Abstract – *Tychius frater* sp. n. from Kazakhstan is described. It belongs to the *T. intrusus* Faust group and appears related to *T. longulus* Desbrochers.

Riassunto – Descrizione di *Tychius frater* sp. n. dell'Asia centrale (Coleoptera Curculionidae).

Viene descritta una nuova specie di *Tychius* Germar: *T. frater* del Kazakhstan. Essa appartiene al gruppo del *T. intrusus* Faust ed è affine a *T. longulus* Desbrochers.

Key words – Curculionidae, *Tychius*, *Tychius intrusus* group, new species, Central Asia.

Introduction

By the examination of many specimens of *Tychius* Germar recently collected in the Central Asia, we found specimens belonging to one new species which we describe as follows.

The abbreviations used in the text are: IZM = Institute of Zoology, Byelorussian Academy of Sciences, Minsk, Byelorussia; IZSP = Institute of Zoology, Russian Academy of Sciences, St. Petersburg, Russia; CC = Caldara collection, Milano, Italy; E = elytra; P = prothorax; R = rostrum; l = length; w = width.

Tychius frater sp. n.

Description. Length mm 2.4-2.7.

Integument: blackish brown except rostrum from antennal insertion to apex, antennae, tibiae and tarsi reddish brown; scarcely visible on dorsum between dense vestiture formed by recumbent scales of two different shapes and colors: subelliptical to subrectangular (l/w 3-4) metallic brown (lighter at pronotal midline), and wider (l/w 1.5-3), subelliptical to suboval, whitish grey. The latter numerous at base and sides of pronotum and on

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elytral interstriae 1, 5, 6, 7, 9 and 10 (arranged in 2-3 confused rows) and sparse on other interstriae. Striae scarcely visible, covered with narrow whitish scales. Venter densely covered with subelliptical whitish scales varying in length.

Head: eyes convex, slightly prominent. Frons slightly wider than rostrum at base. Rostrum short (Rl/Pl male 0.65-0.68, female 0.71-0.80), in dorsal view sides slightly convergent from base to apex, in lateral view gradually narrowed from base to apex; in male slightly and in female distinctly curved at base, nearly straight apically (figs. 1-2). Antennal funicle of seven segments; 1st segment more robust and about 1.5 times longer than 2nd.

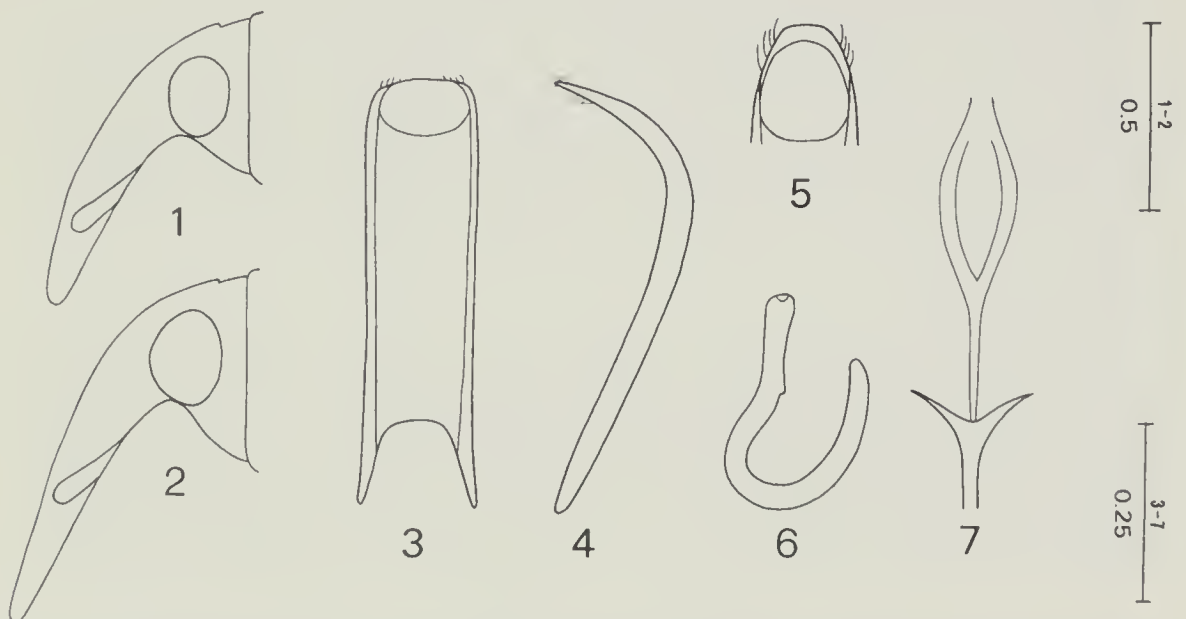
Prothorax: slightly wider than long (w/l 1.10-1.21), with sides slightly rounded from base, widest in basal half, narrowed and slightly sinuate at apex, slightly convex on dorsum.

Elytra: elongate (l/w 1.36-1.42), wider than prothorax (Ew/Pw 1.19-1.28), with sides subparallel in basal 2/3, curvilinear and convergent to apex, moderately convex on dorsum.

Legs: metafemora with small, distinct tooth; profemora of male without fringe of scales; protibiae of male with sharp tooth at middle along inner margin; 3rd tarsal segment bilobed, distinctly wider than 2nd, claw processes 1/2 as long as claw.

Genitalia: median lobe figs. 3-5; spermatheca fig. 6; spiculum ventrale fig. 7.

Variability. The specimens of the type series exhibit little variation. However, the width of the scales is moderately variable, and sometimes the brown scales are light and poorly contrasted from the greyish ones. The elytra and prothorax vary slightly in curvature. Finally, the median lobe of the only male from Drhabagly river is slightly shorter and with moderately emarginate apex.



Figs. 1-7 - *Tychius frater* sp. n., male (1) and female (2) rostrum; median lobe in dorsal (3) and lateral view (4), and particular of the apex (5); spermatheca (6); spiculum ventrale (7). Scales in mm.

Type material. Holotype male: «Kazakhstan, West Tien-Shan, Karatau Mts., Bajzhansaj, 25-27. V. 1990, on *Astragalus ugamicus*, V. Karasyov leg.» (IZM). Paratypes: 5 males and 9 females same data as holotype (IZM, CC); 1 male and 4 females «Kazakhstan, Talasskij Alatau, Dzhabagly river, 2000 m, 20. V. 1990, on *Astragalus neolypskianus*, Karasyov leg.» (IZM); 1 male and 1 female «Kazakhstan, Aksu-Dzhabagly res., Taldybulak river, 1600 m, 23. IV. 1983, on *Astragalus neolypskianus*, E. Ishkov leg.» (IZM); 1 male ditto except «1400 m, 16. IV. 1983» (IZM); 1 male and 3 females «N. Kazakhstan, Dzhezkazgan, 25. V. 1981, L. Rodionov leg.» (IZSP).

Etymology. The Latin substantive «frater» (= brother) refers to the close similarity to other species of the group.

Comparative notes. In the key to the Palearctic *Tychius* (Caldara, 1990), this species must be placed near *T. longulus* Desbrochers and *T. tridentinus* Penecke, with which it shares the general habitus and the shape of the dorsal vestiture. *Tychius frater* is distinguished from both species by the more evidently sexually dimorphic rostrum, the protibiae of the male with sharp tooth at middle along inner margin and the shape of the male and female genitalia. It differs from *T. tridentinus* also by lacking a fringe of scales on the profemora of the male.

Biological note. This new species was collected netting two species of *Astragalus*, *A. ugamicus* Pop. and *A. neolypskianus* Pop. which are both endemic in the Central Asia. This genus of *Fabaceae* is the host genus also of most species of the *T. intrusus* group (Caldara, 1990; Karasyov, 1994).

References

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